

WHAT IS CLAIMED IS:

1. A method of coating a semiconductor substrate material with a coating material comprising:
mixing an adhesion promoter with a coating material; and
applying the mixture to said semiconductor substrate material.
2. The method of claim 1 further comprising:
selecting an adhesion promoter that is compatible with both the semiconductor substrate material and the coating material.
3. The method of claim 1 further comprising:
selecting properties required of a final product ;
and selecting a semiconductor substrate material and a coating material to provide said properties.
4. The method of claim 3 further comprising:
selecting an adhesion promoter that is compatible with said semiconductor substrate material and said coating material.
5. The method of claim 1 wherein said coating material is a liquid.
6. The method of claim 1 wherein said semiconductor substrate material is a flexible web.
7. The method of claim 1 wherein said coating material is comprised of NOA83H.
8. The method of claim 1 wherein said coating material is comprised of polyurethane, acrylate and photoinitiator.
9. The method of claim 1 wherein said selected adhesion promoter is an organosilane compound.
10. The method of claim 1 wherein said selected adhesion promoter is a compound also suitable as a coating material.
11. The method of claim 1 wherein said adhesion promoter is VM-652.

12. The method of claim 2 wherein the compatibility of said adhesion promoter is identified by reference to the contact angle of the liquid-solid interface.

13. A method for coating a semiconductor substrate comprising:
mixing a coating material with an adhesion promoter to produce a coating mixture; and
applying said mixture to the semiconductor substrate.

14. The method of claim 13 wherein said coating mixture has improved adhesion properties compared to said coating material.

15. The method of claim 13 wherein said coating material is comprised of NOA82H, and wherein said adhesion promoter is VM-652.

16. An apparatus for coating a semiconductor substrate material with a coating material comprising:

a mixer for mixing adhesion promoters with coating materials; and
means for applying said mixture of adhesion promoters and coating materials to a semiconductor substrate.

17. A coated semiconductor substrate that comprises:
a semiconductor substrate; and
a coating mixture comprised of adhesion promoter and photopolymer applied to said semiconductor substrate.

18. The coated semiconductor substrate of claim 17 wherein said semiconductor substrate is a flexible amorphous silicon-coated web.

19. The coated semiconductor substrate of claim 19 wherein said coating mixture includes VM-652 and NOA83H.

20. The coated semiconductor substrate of claim 19 wherein said coating mixture is applied to said semiconductor substrate using spin coating.

21. The method of coating a semiconductor substrate comprising:
mixing VM-652 with NOA83H to form a coating mixture;
spin coating said semiconductor substrate with said coating mixture to form a coated
semiconductor substrate; and
subjecting said coated semiconductor substrate to an ultraviolet light source so as to cure
said coating mixture.